

Work Order ID 139966

December 15, 2015 3:01:52 PM

139966

Page 1

Item ID: E4702-041

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Ladder Assembly

Start Date: 12/15/2015 Start Qty: 6.00

6

Cust Item ID:

Required Date: 3/4/2016 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals:

Process Plan: SHADate: 20151215

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

E4702

REV. A

0.00

100

100

Purchasing

Memo

0.00

Purchasing

Purchasing

Issue P/O: 30760

Supplier: WEJAY.

Machine as per Dwg E4702-1

Conformity sheet required

DEC 17 2015

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Memo

0.00

Packaging

DAS
6
9-39

FEB 22 2016

Work Order ID 139966

December 15, 2015 3:01:52 PM

139966

Page 2

Item ID: E4702-041

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Ladder Assembly

Stop ***NS2***

Start Date: 12/15/2015 Start Qty: 6.00

6

Cust Item ID:

Required Date: 3/4/2016 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

QC6- Inspect dimensions to drawing

0.00

120

QC

Memo

0.00

Quality Control

DAS
38
9-89

MAR 01 2016

130

Chemical Conversion Coat per QSI005 4.1

0.00

130

HandFinish

Memo

0.01

Hand Finishing

16-3-12

140

QC7-Inspect Chemical Conversion Coat

0.00

140

QC

Memo

0.00

Quality Control

DAS
41
7-89

16-3-2

Work Order ID 139966

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139966

Page 4

Item ID: E4702-041

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Ladder Assembly

Start Date: 12/15/2015 Start Qty: 6.00

6

Cust Item ID:

Required Date: 3/4/2016 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamps

144

QC5- Inspect part completeness to step on W/O

0.00

144

QC

Memo

0.00

Quality Control

6**38**
9-89

APR 21 2016

150

Identify as per dwg & Stock Location St

0.00

150

Packaging

Memo

0.00

Packaging

6

APR 22 2016

DAS
6
9-89

160

QC21- Final Inspection - Work Order Release

0.00

160

QC

Memo

0.01

Quality Control

ML

APR 25 2016

2m 16/04/22

ML APR 25 2016

Picklist Print

December 15, 2015 3:01:58 PM

Page 1

4

Work Order ID: 139966

139966

Parent Item: E4702-041

F4702-041

Parent Item Name: Ladder Assembly

Start Date: 12/15/2015

Required Date: 3/4/2016

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP REV:A NEW ISSUE 14-01-22 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status									
E4702-1P *F4702-1P* Ladder		Purchased	No				Each	0.0000		6 **/39966	DAS 6 9-89		FEB 22 2016									
E4715-1 *F4715-1* Stud		Manufactured	No				Each	0.0000		36 ** 140001			DAS 6 9-89									
E4715-3 *F4715-3* Stud		Manufactured	No				Each	1.0000		12 ** 140001 140000												
<table><tr><th>Location</th><th>Loc Qty</th><th>Loc Code</th></tr><tr><td>ST117</td><td>1</td><td></td></tr><tr><td>111884</td><td>1</td><td></td></tr></table>														Location	Loc Qty	Loc Code	ST117	1		111884	1	
Location	Loc Qty	Loc Code																				
ST117	1																					
111884	1																					

DAS
6
9-89

APR 27 2016

DAS
9-89

APR 22 2016

Picklist Print

December 15, 2015 3:01:59 PM

Page 2

Work Order ID: 139966

Parent Item: E4702-041

Parent Item Name: Ladder Assembly

139966

F4702-041

Start Date: 12/15/2015

Required Date: 3/4/2016

Start Qty: 6.00

Required Qty: 6.00

MS21042L4

Purchased

No

Each

3,335.000

36

MS21042L4

Locknut

**

FF

APR 20 2016

Location

Loc Qty

Loc Code

FP001

137

m133363

137

GA

49

m127813

49

ST260a

92

m130799

56

m132262

36

ST303

2924

m133769

2924

ST305

133

m128300

8

m130388

4

m130922

97

m132123

24

36

December 15, 2015 3:01:59 PM

Shop Packet Print

Page 2

Picklist Print

December 15, 2015 3:01:59 PM

Page 3

Work Order ID: 139966

Parent Item: E4702-041

Parent Item Name: Ladder Assembly

139966

F4702-041

Start Date: 12/15/2015

Required Date: 3/4/2016

Start Qty: 6.00

Required Qty: 6.00

MS21042L5

Purchased

No

Each

580.0000

12

MS21042L5

Nut

**

FF

APR 20 2016

Location

Loc Qty

Loc Code

GA

146

m127813

146

ST303

300

m133577

200

m133790

100

ST304

86

m133363

86

ST305

48

m127813

19

m131340

21

m132123

8

NAS1149D0463J

Purchased

No

Each

2,834.000

36

NAS1149D0463J

WASHER

**

FF

APR 20 2016

Location

Loc Qty

Loc Code

GA

432

M129390

41

M132035

391

ST263

968

M133284

42

M133316

926

ST269

1434

M129682

39

M130799

371

M132317

101

M132677

888

M133077

35

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Shop Packet Print

Page 3

Picklist Print

December 15, 2015 3:01:59 PM

Page 4

Work Order ID: 139966

Parent Item: E4702-041

Parent Item Name: Ladder Assembly

139966

F4702-041

Start Date: 12/15/2015

Required Date: 3/4/2016

Start Qty: 6.00

Required Qty: 6.00

NAS1149D0563J

Purchased

No

Each

1,211.000

18

NAS1149D0563.J

Washer

**

FF

APR 20 2016

Location

Loc Qty

Loc Code

GA

53

m125807

53

ST260a

520

m130799

55

m132035

55

m132256

10

m133769

400

ST263

463

m133134

129

m133363

334

ST269

156

m128257

156

ST271

19

m131026

19

NAS76A4-020P

Purchased

No

Each

23.0000

18

NAS76A4-020P

Bushing

**

134029x15

DAS
6
9-89

Location

Loc Qty

Loc Code

ST260

23

m129112

23

NAS76A4-025P

Purchased

No

Each

5.0000

6

NAS76A4-025P

Bushing

**

134029 Y1

DAS
6
9-89
APR 20 2016

Location

Loc Qty

Loc Code

ST260

5

m128880

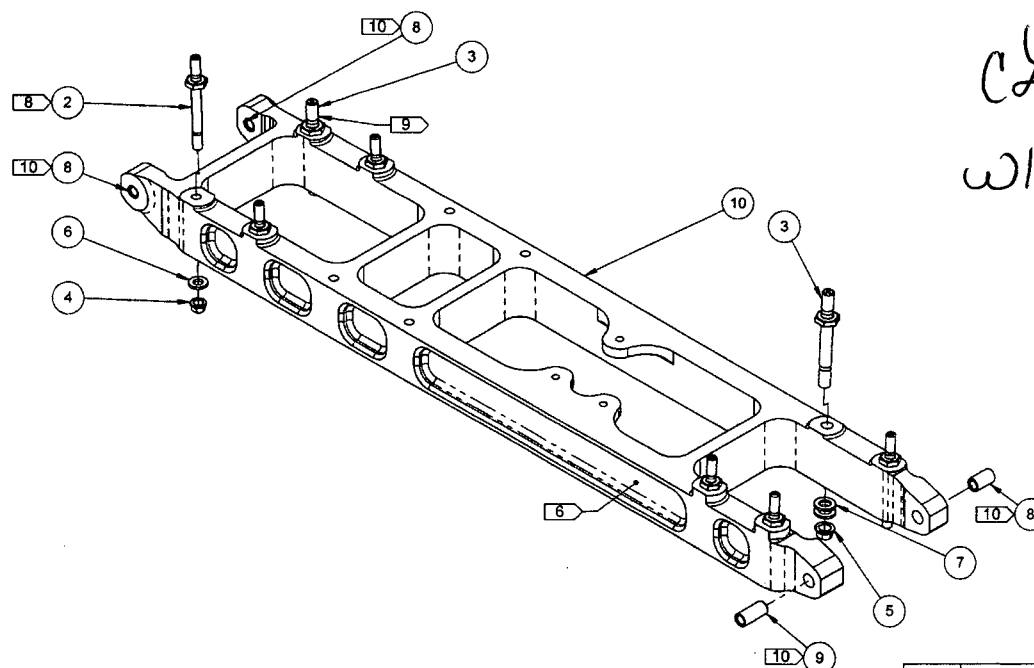
5

December 15, 2015 3:01:59 PM

Shop Packet Print

Page 4

ITEM NO.	QTY. -041	PART NUMBER	DESCRIPTION
1	X	E4702-041	LADDER ASSEMBLY
2	6	E4715-1	STUD
3	2	E4715-3	STUD
4	6	MS21042L4	NUT
5	2	MS21042L5	NUT
6	6	NAS1149D0463J	WASHER
7	3	NAS1149D0563J	WASHER
8	3	NAS76A4-020P	BUSHING
9	1	NAS76A4-025P	BUSHING
10	1	E4702-1	LADDER



CL DEC 17 2015
W10.139966

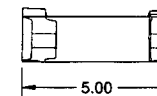
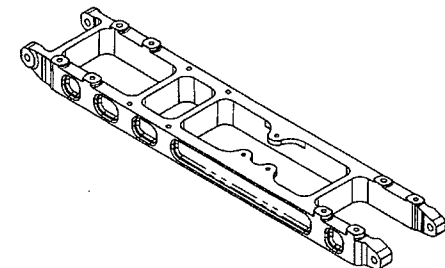
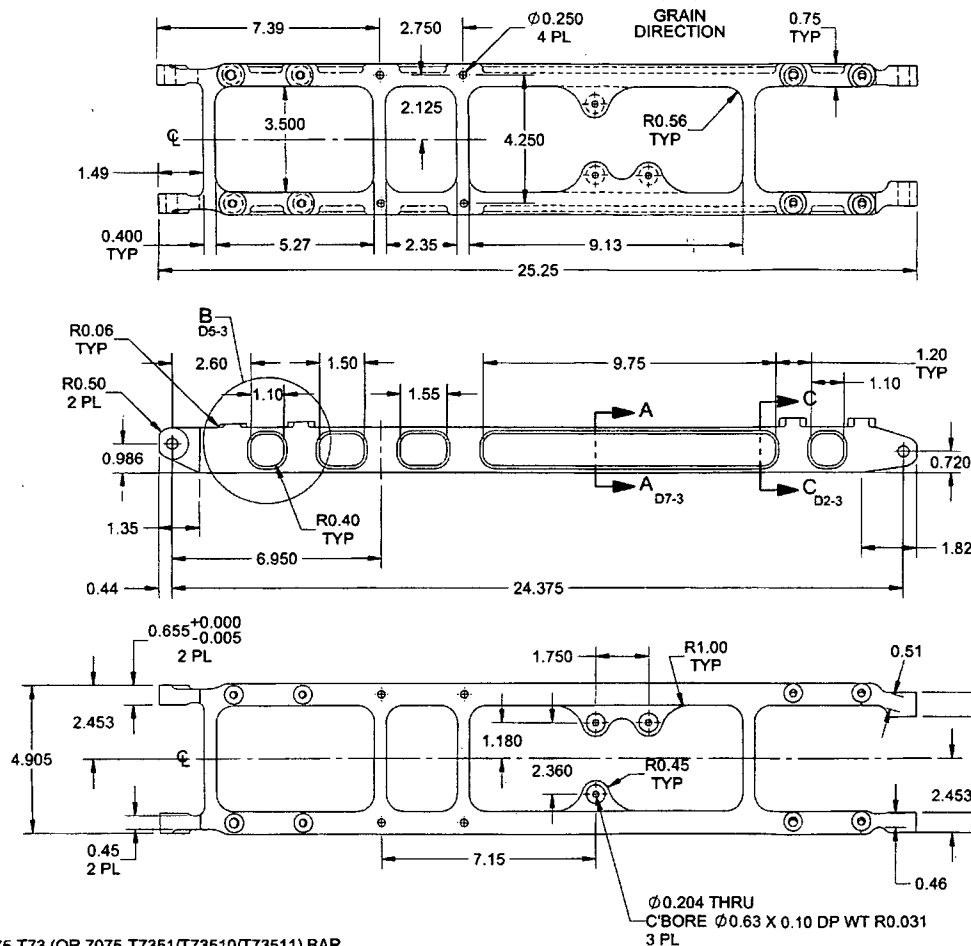
RELEASED
R 2013-11-23
JW

E4702-041 LADDER ASSEMBLY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 6.15 lbs
- 8) TORQUE 1/4" FASTENERS TO 50-70 IN-LB (6 PL)
- 9) TORQUE 5/16" FASTENERS TO 100-140 IN-LB (2 PL)
- 10) REAM BUSHING HOLES USING $\varnothing 0.3745$ REAMER. INSTALL BUSHINGS WITH WET PRIMER.

A NEW ISSUE		RF	12.08.27
REV.	DESCRIPTION		BY DATE
DESIGN	RF	EAGLE COPTERS LTD. CALGARY, ALBERTA, CANADA	
DRAWN	RF		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	E4702	SHEET 1 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	LADDER	NTS
DATE		12.08.27	COPYRIGHT © 2012 BY EAGLE COPTERS LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM EAGLE COPTERS LTD.



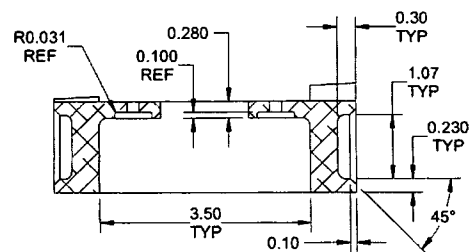
- NOTES:**
- 1) MATERIAL: 7075-T73 (OR 7075-T7351/T73510/T73511) BAR
PER AMS-QQ-A-200/11 OR AMS-QQ-A-225/9 (AMS 4124)
OR AMS-QQ-A-250/12 (AMS 4078)
REF DART SPEC M7075T73B
 - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME YELLOW PER DART QSI 005 4.2
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 5.64 lbs
 - 8) SURFACE FINISH TO BE NO GREATER THAN 80 MICROINCH
 - 9) UNDEFINED FEATURES ARE CONTROLLED BY SOLIDWORKS MODEL E4702
 - 10) LPI PER ASTM 1417 LEVEL 2

E4702-1 LADDER

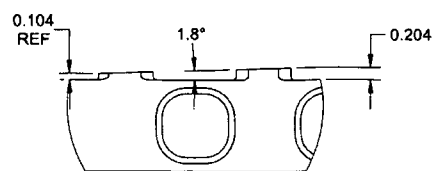
CRITICAL PART
MRB DECISIONS ON THIS PART MAY ONLY BE PERFORMED BY
DART DE#02. ANY CHANGES TO THE DESIGN, MANUFACTURING
PROCESS, APPROVED OPERATING ENVIRONMENT, AND DESIGN
LOADING SPECTRUM WILL REQUIRE A REVIEW OF THE FATIGUE
EVALUATION FOR THIS PART.

DESIGN	RF	EAGLE COPTERS LTD. CALGARY, ALBERTA, CANADA	
DRAWN	RF		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	E4702	SHEET 2 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	LADDER	NTS
DATE	12.08.27	COPYRIGHT © 2012 BY EAGLE COPTERS LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM EAGLE COPTERS LTD.	

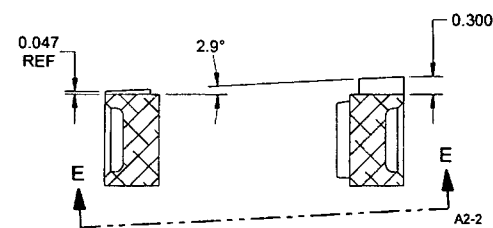
RELEASED
2013-11-23



SECTION A-A C5-2

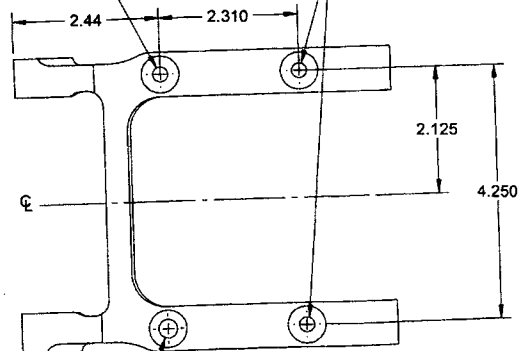


DETAIL B C7-2



SECTION C-C B2-3

$\varnothing 0.250$ THRU
 C'BORE $\varnothing 0.63 \times 0.14$ DP WT R0.031
 PERPENDICULAR TO ISLAND
 2.44 2.310
 $\varnothing 0.250$ THRU
 C'BORE $\varnothing 0.63 \times 0.13$ DP WT R0.031
 PERPENDICULAR TO ISLAND
 2 PL



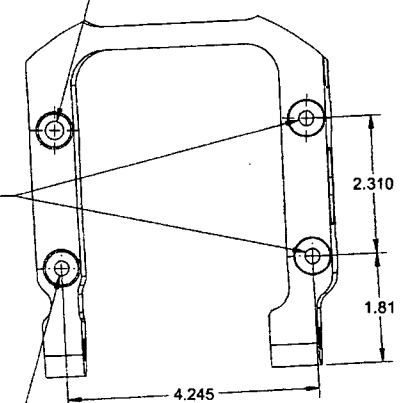
SECTION D-D C5-3

$\varnothing 0.313$ THRU
 C'BORE $\varnothing 0.63 \times 0.14$ DP WT R0.031
 PERPENDICULAR TO ISLAND

$\varnothing 0.250$ THRU
 C'BORE $\varnothing 0.63 \times 0.20$ DP WT R0.031
 PERPENDICULAR TO ISLAND
 2 PL

$\varnothing 0.250$ THRU
 C'BORE $\varnothing 0.63 \times 0.14$ DP WT R0.031
 PERPENDICULAR TO ISLAND

$\varnothing 0.313$ THRU
 C'BORE $\varnothing 0.63 \times 0.14$ DP WT R0.031
 PERPENDICULAR TO ISLAND



DETAIL E D2-3

RELEASED
2013-11-28

DESIGN	RF	EAGLE COPTERS LTD.	
DRAWN	RF	CALGARY, ALBERTA, CANADA	
CHECKED	RF	DRAWING NO.	REV. A
MFG. APPR.	RF	E4702	SHEET 3 OF 3
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	LADDER	NTS
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Packing Slip 37729

600 O'CONNOR DRIVE, KINGSTON, ONTARIO K7P 1N3
 TEL: 613-384-1662 FAX: 613-384-2997
 www.wejay.com

S
O
L
D
T
O

S
H
I
P
T
O

Part Assembly
 ID 1111111111
 NEWKESBURY ONT L0N 4N 1N

INVOICE DATE	YOUR ORDER NO.	DATE ORDERED 12/15/15	SHIPPED VIA BEST WAY
CUSTOMER CODE	PROV. LIC. NO.	Extra ☐ Exempt ☐	TERMS

QUANTITY ORDERED	B.O.	QUANTITY SHIPPED	DESCRIPTION	UNIT PRICE	AMOUNT
6	—	6	part assembly as per drawing B4700, Rev. A part assembly		
6	—	6	part assembly support bracket per drawing B4700, part assembly		

RELEASE NOTE

I certify that the items listed herein have been inspected and tested and conform to all specifications and requirements in the contract or purchase order.

Inspection Supervisor

[Signature]
 FEB 16/16



G.S.T.

P.S.T.

ORDER: COMPLETE ☐ PARTIAL ☐

TOTAL

RECEIVED BY _____

1.5% PER MONTH (18% PER ANNUM)
 CHARGED ON OVERDUE ACCOUNTS

NO GOODS RETURNED WITHOUT
 PRIOR AUTHORIZATION



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO30760**

Purchase Order Date 12/17/2015

PO Print Date 12/17/2015

Page Number 1 of 2

Order From : VC-WMP001

WEJAY MACHINE PRODUCTS CO. LTD
600 O'CONNOR DRIVE
KINGSTON, ONTARIO K7P 1N3
CANADA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED
DEC 18 2015

Contact Name
Vendor Phone 613-384-1662

Ship To Contact
Ship To Phone
Ship Via: FedEx Overnight collect
Ship Acct:

Buyer
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency CAD
FOB Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	E4702-1P AS PER DWG E4702 REV. A B139966 MATERIAL SUPPLIED FROM WEJAY	Ladder	2/12/2016 Yes 2/12/2016		6.00 Each	\$1,895.00	\$11,370.00
Line Total:							\$11,370.00
2	E4706-1P AS PER DWG E4706 REV. B B139967 MATERIAL SUPPLIED FROM WEJAY	Support Bracket	2/12/2016 Yes 2/12/2016	FN	6.00 Each 16/12/15	\$2,025.00	\$12,150.00
Line Total:							\$12,150.00

PO Instructions: QUOTATION NO. WJ-8767

Note:

12/17/2015



600 O'CONNOR DRIVE, KINGSTON, ONTARIO K7P 1N3

PHONE: (613) 384-1662

FAX: (613) 384-2997

CERTIFICATE OF COMPLIANCE

CUSTOMER: Dart Aerospace		DATE: Feb. 16, 2016	
		P.O.# PO30760	
		WEJAY JOB# 37729	
I hereby certify that the following material has been inspected/tested and conforms to the requirements and specifications as stated in your contract and as noted below.			
PART NO.	QTY.	PROCESS (ES)	SPECIFICATION / REV
E4702-1P 'Ladder' B139966	6	Machined complete per drawing req'ts.	E4702 / rev. A
Note: 1) Material Test Cert. attached -ref. 'Kaiser Aluminum' Lot# 144419B9 (Wejay TN# 31699-1). 2) Inspection / Test Reports attached.			

Records of Inspection/Test will be retained for 5 years minimum.

Sincerely,



Clifford Smith
Authorized Q.A. Signatory

THYSSENKRUPP MATERIALS NA

EJAY MACHINE PROD LTD

ALUMINUM PLATE 7075-T7351 US1

0" THICK X 5.2500" X 25.5000"

ART NO. PER AMS-QQ-A-250/12

PO/Ref 31699

/ANGIE

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-970906-001

5Jan16

Signed by: _____ Pg 1/2

SHIP TO:

COPPER & BRASS SALES
5 STERLING DRIVE
WALLINGFORD, CT 06492

SOLD TO

COPPER & BRASS SALES
ATTN: ACCOUNTS PAYABLE
P.O. Box 5116
SOUTHFIELD, MI 48086

**KAISER
ALUMINUM**

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
4385797

CUSTOMER PO NUMBER: 5400254393	WORK PACKAGE:	CUSTOMER PART NUMBER: ALFLR01031-80.5	SHIP RUN/LOAD: 103285/3	GOVT CONTRACT NUMBER:
KAISER ORDER NO: 1192682	LINE ITEM: 7	SHIP DATE: 8-AUG-2015	ALLOY: 7075	CLAD: BARE
TEMPER: T7351	PRODUCT DESCRIPTION: KaiserSelect Plate	WEIGHT SHIPPED: 107421 B	QUANTITY: 6 PCS EST.	TRUCK DIM: 2055340
GAUGE: 2.0000 IN (50.8000 MM)	DIAMETER/WIDTH: 60.500 IN (1536.7 MM)	LENGTH: 144.500 IN (3670.3 MM)		

MHU 1917970: LOT 14448984: 2 pieces;
MHU 1917972: LOT 14441989: 2 pieces;
MHU 1917974: LOT 14441989: 2 pieces;

Certified Specifications

AMS 4078/RevJ
ASTM B 209/Rev14
ESS 1055/RevB
DPS 4.713/RevAK
MMS 159/RevT

AMS-QQ-A-250/12/RevA
ASTM B 594/Rev13
CMMP 025/RevJ
GAMPS 9101/RevB/AmdSCN1
PPS 20.04/Rev7

AMS-STD-2154/RevA
BAC 5439/RevJ
CSTI 006/RevE
GSS16100/RevG/Amd1
PS 21211/RevM

Test Code: 4297

Test Results

Lot: 14441989 Cast 646 Drop 17 Ingot 1 Melted in USA

(ASTM B8/B557)
(EN 2002-1)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPa)	Yield KSI (MPa)	Elongation %
	T7351	LT / 2 (Min:Max)	71.4 : 72.0 (492 : 496)	60.6 : 62.3 (419 : 430)	11.3 : 12.3

(ASTM E1004)
(EN 2004-1)
Conductivity %IACS : 40.6 Min 40.8 Max
(MS/M) : 23.5 Min 23.7 Max

(ASTM E1251)
Chemistry: SI FE CU MN MG CR ZN TI V ZR OTHER
Actual(wt%) 0.08 0.17 1.4 0.04 7.4 0.20 5.5 0.03 0.01 0.01 TOT 0.05

Page 1 of 2

From: ThyssenKrupp Materials NA

Cust. THYSSENKRUPP MATERIALS CA LTD Del.: 2404273065

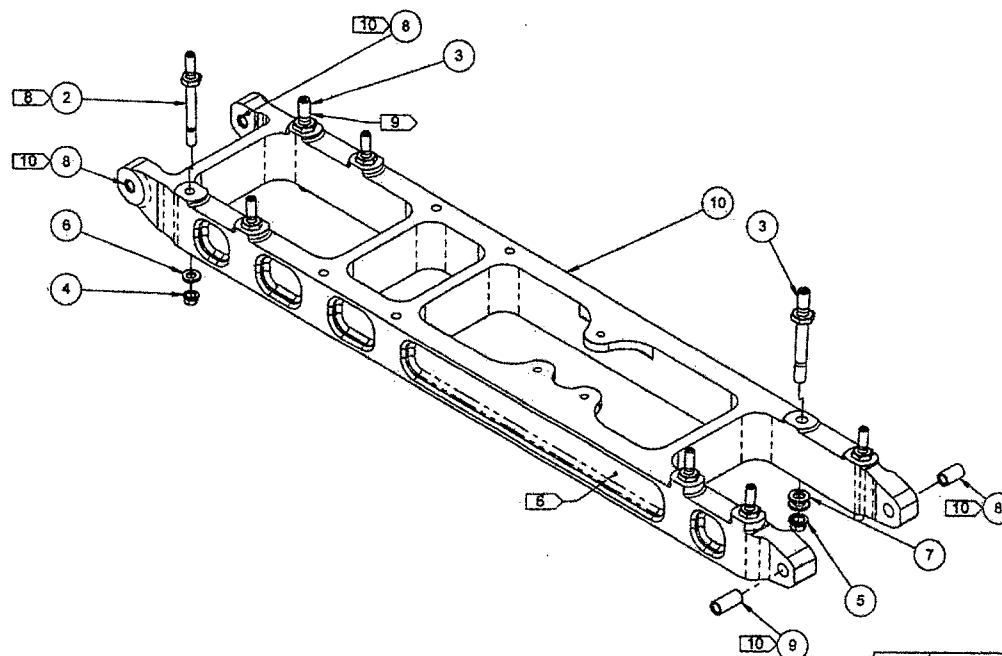
CstAr CstOr 272192

Wgt.: 164.100 LB Date 12/22/2015



Thomas Sanchez
TN 31699-1
REC'D JAN 6/16
DART P.O.# P030760
JOB# 37729

ITEM NO.	QTY. 041	PART NUMBER	DESCRIPTION
1	X	E4702-041	LADDER ASSEMBLY
2	6	E4715-1	STUD
3	2	E4715-3	STUD
4	6	MS21042L4	NUT
5	2	MS21042L5	NUT
6	6	NAS1149D0463J	WASHER
7	3	NAS1149D0563J	WASHER
8	3	NAS76A4-020P	BUSHING
9	1	NAS76A4-025P	BUSHING
10	1	E4702-1	LADDER



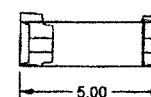
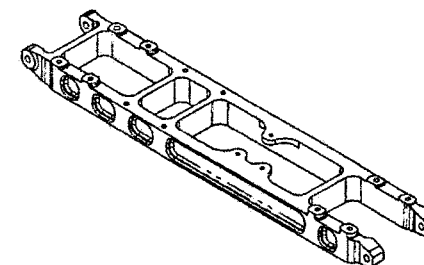
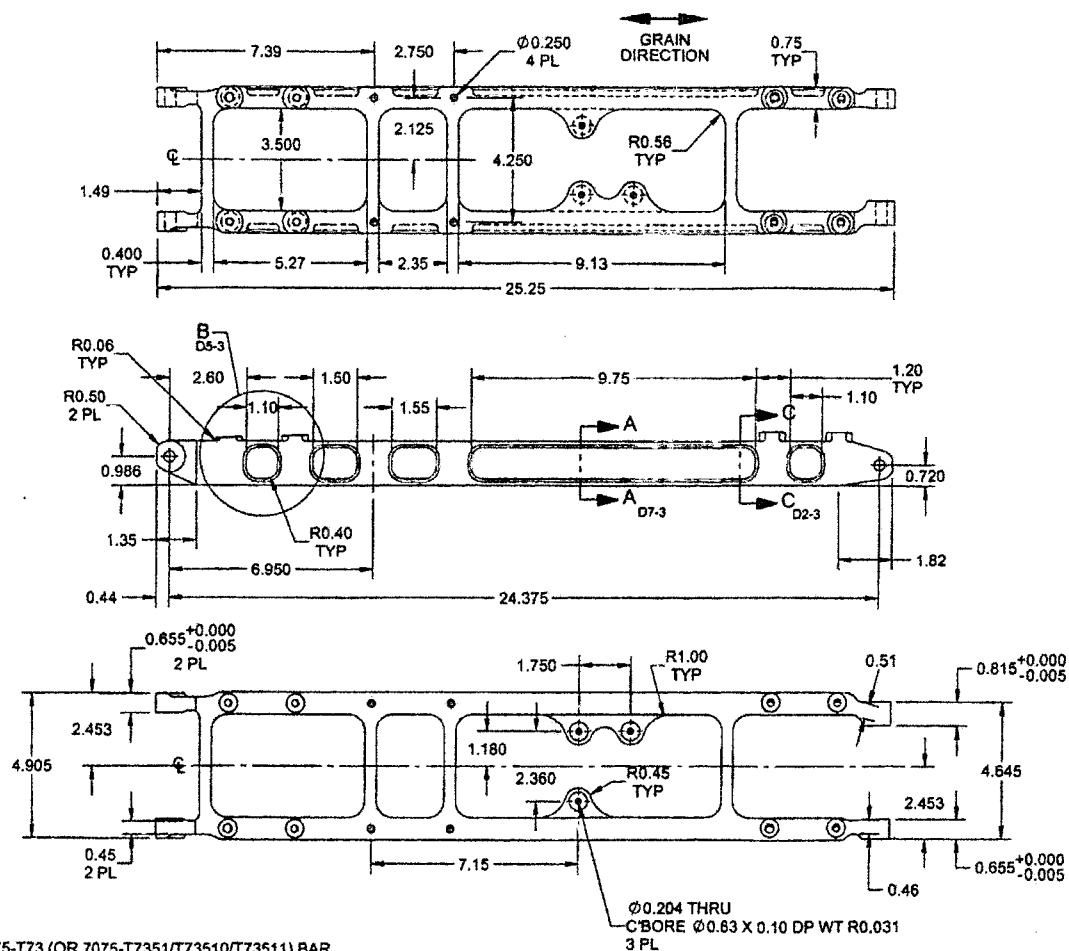
E4702-041 LADDER ASSEMBLY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 6.15 lbs
- 8) TORQUE 1/4" FASTENERS TO 50-70 IN.-LB (6 PL)
- 9) TORQUE 5/16" FASTENERS TO 100-140 IN.-LB (2 PL)
- 10) REAM BUSHING HOLES USING $\varnothing 0.3745$ REAMER. INSTALL BUSHINGS WITH WET PRIMER.

RELEASED
2013-11-23
JW

A NEW ISSUE		RF	12.08.27
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	EAGLE COPTERS LTD.	
DRAWN	RF	CALGARY, ALBERTA, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	E4702	SHEET 1 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	LADDER	NTS
DATE	12.08.27	COPYRIGHT © 2012 BY EAGLE COPTERS LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE LENT, REPRODUCED, COPIED, OR OTHERWISE DISSEMINATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM EAGLE COPTERS LTD.	



RELEASED
2013-11-23

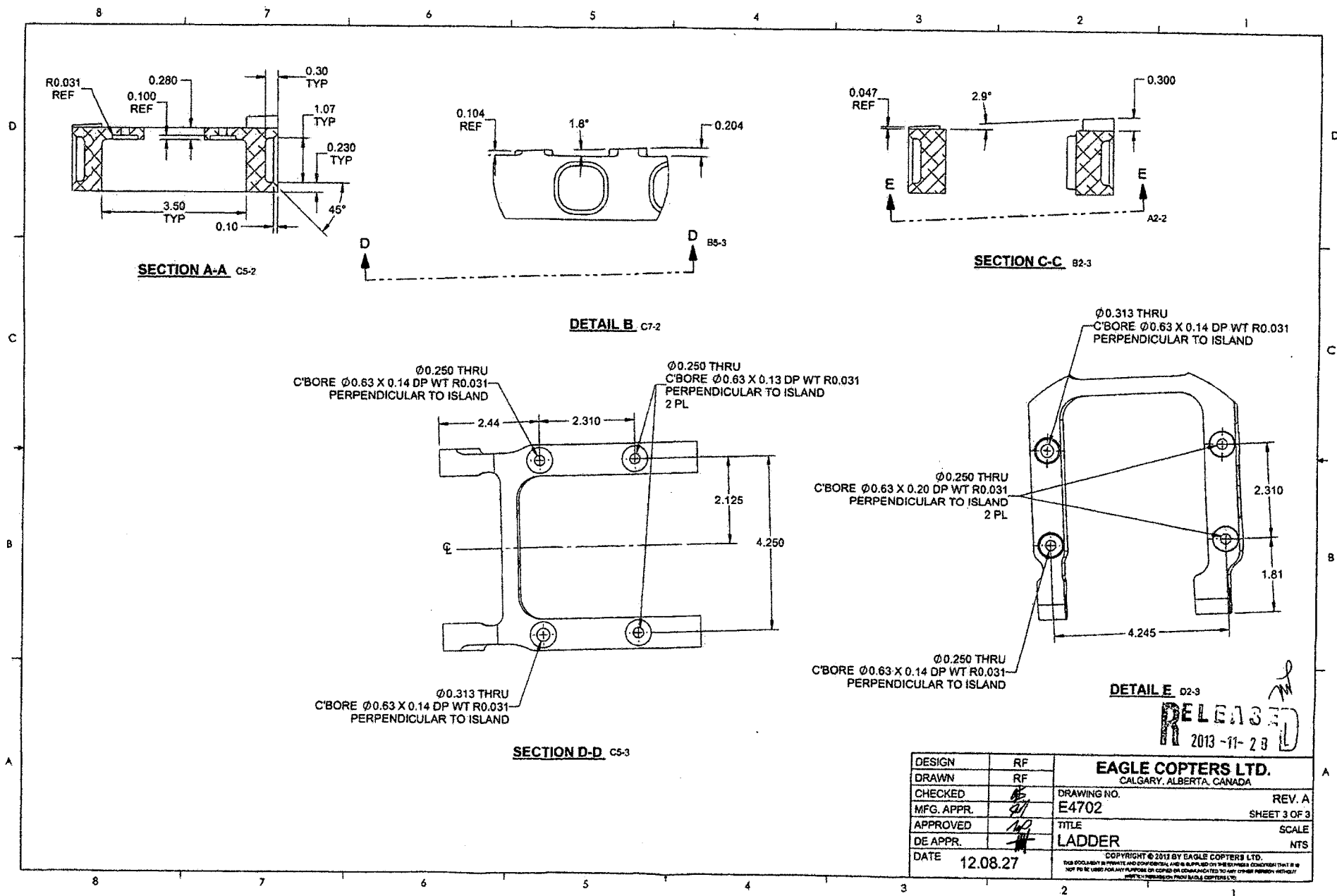
NOTES:

- 1) MATERIAL: 7075-T73 (OR 7075-T7351/T73510/T73511) BAR
PER AMS-QQ-A-200/11 OR AMS-QQ-A-225/9 (AMS 4124)
OR AMS-QQ-A-250/12 (AMS 4078)
REF DART SPEC M7075T73B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME YELLOW PER DART QSI 005 4.2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 5.64 lbs
- 8) SURFACE FINISH TO BE NO GREATER THAN 80 MICROINCH
- 9) UNDEFINED FEATURES ARE CONTROLLED BY SOLIDWORKS MODEL E4702
- 10) LPI PER ASTM 1417 LEVEL 2

E4702-1 LADDER

CRITICAL PART
MRB DECISIONS ON THIS PART MAY ONLY BE PERFORMED BY
DART DE#02. ANY CHANGES TO THE DESIGN, MANUFACTURING
PROCESS, APPROVED OPERATING ENVIRONMENT, AND DESIGN
LOADING SPECTRUM WILL REQUIRE A REVIEW OF THE FATIGUE
EVALUATION FOR THIS PART.

DESIGN	RF	EAGLE COPTERS LTD. CALGARY, ALBERTA, CANADA	
DRAWN	RF		
CHECKED	RF	DRAWING NO. E4702	REV. A
MFG. APPR.	RF		SHEET 2 OF 3
APPROVED	RF	TITLE LADDER	SCALE NTS
DE APPR.	RF		
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DESIGN	RF	EAGLE COPTERS LTD. CALGARY, ALBERTA, CANADA	
DRAWN	RF		
CHECKED	RF	DRAWING NO.	REV. A
MFG. APPR.	RF	E4702	SHEET 3 OF 3
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	LADDER	NTS
DATE	12.08.27	COPYRIGHT © 2013 BY EAGLE COPTERS LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON OR ENTITY WITHOUT PERMISSION FROM EAGLE COPTERS LTD.	

Customer Dart Aerospace Customer P.O. PO30760
 Drawing # E4702 Drawing rev A
 Part Number E4702-1 E.C.O. -
 Part Name Ladder Material Aluminum Alloy 7075-T7351 per AMS QQ-A-250/12
 Serial # 37729-001 Inspected by Cliff Smith
 Job # 37729 Signature:



ACCEPTED



Overall Result

All Characteristics:

199

Out of tolerance:

0

Over Warning Limit:

0

Not Calculated:

0

Comment: Material: 7075-T7351 per AMS QQ-A-250/12
 ref. 'Kaiser Aluminum' Lot# 144419B9
 (Wejay TN# 031699-1)

Feature	ID	Actual	Nominal	Pos Tol.	Neg Tol.	Deviation	<-->	
5.00 width o.a.	2_C3	CartDist	5.0045	5.0000	0.0300	-0.0300	0.0045	-
25.25 dim 1	2_C6	X	25.2510	25.2500	0.0300	-0.0300	0.0010	-
25.25 dim 2	2_C6	X	25.2502	25.2500	0.0300	-0.0300	0.0002	-
2.453 dim	2_B8	Y	-2.4533	-2.4525	0.0100	-0.0100	-0.0008	-
2.453 dim 2	2_B4	Y	-2.4540	-2.4525	0.0100	-0.0100	-0.0016	-
4.905 dim	2_B8	CartDist	4.9061	4.9050	0.0100	-0.0100	0.0011	-
4.645 dim	2_B3	CartDist	4.6488	4.6450	0.0100	-0.0100	0.0038	-
.655 dim 1 of 2	2_B7	CartDist	0.6538	0.6550	0.0000	-0.0050	-0.0012	-
.655 dim 2 of 2	2_B7	CartDist	0.6532	0.6550	0.0000	-0.0050	-0.0018	-
.655 dim 3	2_B3	CartDist	0.6515	0.6550	0.0000	-0.0050	-0.0035	-
.655 dim 4	2_B3	CartDist	0.8130	0.8150	0.0000	-0.0050	-0.0020	-
.45 dim 1 of 2	2_B7_Y	Dist	0.4487	0.4500	0.0300	-0.0300	-0.0013	-
.45 dim 2 of 2	2_B7_Y	Dist	0.4487	0.4500	0.0300	-0.0300	-0.0013	-
.46 dim	2_B4	ResEle	0.4637	0.4600	0.0300	-0.0300	0.0037	-
.51 dim	2_B4	ResEle	0.4941	0.5100	0.0300	-0.0300	-0.0159	-
1.49 dim	2_D7	X	1.4923	1.4900	0.0300	-0.0300	0.0023	-
5.27 dim	2_D7	CartDist	5.2689	5.2700	0.0300	-0.0300	-0.0011	-
2.35 dim	2_D6	CartDist	2.3500	2.3500	0.0300	-0.0300	0.0000	-
9.13 dim	2_D5	CartDist	9.1249	9.1300	0.0300	-0.0300	-0.0051	-
3.50 dim 1	3_D8	CartDist	3.5013	3.5000	0.0300	-0.0300	0.0013	-
3.50 dim 2	3_D8	CartDist	3.4998	3.5000	0.0300	-0.0300	-0.0002	-
3.50 dim 3	3_D8	CartDist	3.5008	3.5000	0.0300	-0.0300	0.0008	-
3.50 dim 4	3_D8	CartDist	3.5082	3.5000	0.0300	-0.0300	0.0082	-
.40 sect 1	2_D7	CartDist	0.3976	0.4000	0.0300	-0.0300	-0.0024	-
.40 sect 2	2_D7	CartDist	0.4000	0.4000	0.0300	-0.0300	0.0000	-
.40 sect 3	2_D7	CartDist	0.4002	0.4000	0.0300	-0.0300	0.0002	-
.40 sect 4	2_D7	CartDist	0.3955	0.4000	0.0300	-0.0300	-0.0045	-
R 0.56 typ	2_D5	R	0.5620	0.5600	0.0300	-0.0300	0.0020	-
0.250 holes	2_D6(1)	D	0.2507	0.2500	0.0050	-0.0010	0.0007	-
0.250 holes	2_D6(2)	D	0.2507	0.2500	0.0050	-0.0010	0.0007	-
0.250 holes	2_D6(3)	D	0.2506	0.2500	0.0050	-0.0010	0.0006	-
0.250 holes	2_D6(4)	D	0.2504	0.2500	0.0050	-0.0010	0.0004	-



Feature	ID	Actual	Nominal	pos Tol	neg Tol	Diff	<- ->
☐ Pos_250 hole 1 2_D6^X	GDT PosRec X	0.0003 7.3899	0.0000 7.3900	0.0600		0.0003 -0.0001	-
☐ Pos_250 hole 1 2_D6^Y	GDT PosRec Y	0.0096 2.1298	0.0000 2.1250	0.0200		0.0096 0.0048	-
☐ Pos_250 hole 2 2_D6^X	GDT PosRec X	0.0004 2.7498	0.0000 2.7500	0.0200		0.0004 -0.0002	-
☐ Pos_250 hole 2 2_D6^Y	GDT PosRec Y	0.0076 2.1288	0.0000 2.1250	0.0200		0.0076 0.0038	-
☐ Pos_250 hole 3 2_D6^X	GDT PosRec X	0.0020 -0.0010	0.0000 0.0000	0.0200		0.0020 -0.0010	
☐ Pos_250 hole 3 2_D6^Y	GDT PosRec Y	0.0049 -4.2524	0.0000 -4.2500	0.0200		0.0049 -0.0024	
☐ Pos_250 hole 4 2_D6^X	GDT PosRec X	0.0023 2.7489	0.0000 2.7500	0.0200		0.0023 -0.0011	
☐ Pos_250 hole 4 2_D6^Y	GDT PosRec Y	0.0053 -4.2526	0.0000 -4.2500	0.0200		0.0053 -0.0026	-
☐ .3745 dia 1 1_A8	D	0.3749	0.3745	0.0005	0.0000	0.0004	---
☐ 6.950 dim 1 2_C7	X	-6.9524	-6.9500	0.0100	-0.0100	-0.0024	-
☐ .986 dim 1 2_C7	Z	-0.9830	-0.9860	0.0100	-0.0100	0.0030	-
☐ .3745 dia 2 1_A8	D	0.3750	0.3745	0.0005	0.0000	0.0005	---
☐ 6.950 dim 2 2_C7	X	-6.9512	-6.9500	0.0100	-0.0100	-0.0012	-
☐ .986 dim 2 2_C7	Z	-0.9832	-0.9860	0.0100	-0.0100	0.0028	-
☐ .3745 dia 3 1_A8	D	0.3748	0.3745	0.0005	0.0000	0.0003	-
☐ 24.375 dim 1 2_B6	X	24.3767	24.3750	0.0100	-0.0100	0.0017	
☐ .720 dim 1 2_C4	Z	-0.7195	-0.7200	0.0100	-0.0100	0.0005	
☐ .3745 dia 4 1_A8	D	0.3749	0.3745	0.0005	0.0000	0.0004	---
☐ 24.375 dim 2 2_B6	X	24.3779	24.3750	0.0100	-0.0100	0.0029	
☐ .720 dim 2 2_C4	Z	-0.7196	-0.7200	0.0100	-0.0100	0.0004	
☐ .44 dim 1 2_B7	X	0.4511	0.4400	0.0300	-0.0300	0.0111	-
☐ .44 dim 2 2_B7	X	0.4522	0.4400	0.0300	-0.0300	0.0122	-
☐ .986 dim 1 2_C7	Z	-1.0061	-0.9860	0.0300	-0.0300	-0.0201	---
☐ .986 dim 2 2_C7	Z	-1.0063	-0.9860	0.0300	-0.0300	-0.0203	---
☐ 1.35 dim 1_C7	X	1.3478	1.3500	0.0300	-0.0300	-0.0022	-
☐ 1.82 dim 2_C4	X	-1.8151	-1.8200	0.0300	-0.0300	0.0049	
☐ 24.38 dim 1 1_B7_X	Dist	24.3614	24.3800	0.0300	-0.0300	-0.0186	---
☐ 24.38 dim 2 1_B7_X	Dist	24.3616	24.3800	0.0300	-0.0300	-0.0184	---
☐ 2.60 dim sd 1 2_C7	X	2.5858	2.6000	0.0300	-0.0300	-0.0142	---
☐ .230 dim 1 sd 1 3_D7	Z	-0.2283	-0.2300	0.0100	-0.0100	0.0017	
☐ 1.10 dim 1 sd1 2_C7_X	Dist	1.1007	1.1000	0.0300	-0.0300	0.0007	
☐ 1.07 dim 1 sd1 3_D7_Z	Dist	1.0707	1.0700	0.0300	-0.0300	0.0007	
☐ .30 depth 1 sd1 3_D7	Y	0.3049	0.3000	0.0300	-0.0300	0.0049	
☐ .230 dim 2 sd 1 3_D7	Z	-0.2283	-0.2300	0.0100	-0.0100	0.0017	
☐ 1.50 dim sd1 2_C6_X	Dist	1.5007	1.5000	0.0300	-0.0300	0.0007	
☐ 1.07 dim 2 sd1 3_D7_Z	Dist	1.0708	1.0700	0.0300	-0.0300	0.0008	
☐ .30 depth 2 sd1 3_D7	Y	0.3049	0.3000	0.0300	-0.0300	0.0049	
☐ .230 dim 3 sd 1 3_D7	Z	-0.2284	-0.2300	0.0100	-0.0100	0.0016	
☐ 1.55 dim sd1 2_C6_X	Dist	1.5508	1.5500	0.0300	-0.0300	0.0008	



Feature	ID	Actual	Nominal	pos Tol	neg Tol	Diff	<-->
1.07 dim 3 sd1 3_D7_Z	Dist	1.0707	1.0700	0.0300	-0.0300	0.0007	
.30 depth 3 sd1 3_D7	Y	0.3047	0.3000	0.0300	-0.0300	0.0047	
.230 dim 4 sd 1 3_D7	Z	-0.2293	-0.2300	0.0100	-0.0100	0.0007	
9.75 dim sd1 2_C5_X	Dist	9.7507	9.7500	0.0300	-0.0300	0.0007	
1.07 dim 4 sd1 3_D7_Z	Dist	1.0708	1.0700	0.0300	-0.0300	0.0008	
.30 depth 4 sd1 3_D7	Y	0.3058	0.3000	0.0300	-0.0300	0.0058	
1.20 dim sd 1 2_C4_X	Dist	1.1993	1.2000	0.0300	-0.0300	-0.0007	
.230 dim 5 sd 1 3_D7	Z	-0.2290	-0.2300	0.0100	-0.0100	0.0010	
1.10 dim 2 sd1 2_C4_X	Dist	1.1006	1.1000	0.0300	-0.0300	0.0006	
1.07 dim 5 sd1 3_D7_Z	Dist	1.0710	1.0700	0.0300	-0.0300	0.0010	
.30 depth 5 sd1 3_D7	Y	0.3054	0.3000	0.0300	-0.0300	0.0054	
2.60 dim sd 2 2_C7	X	2.5869	2.6000	0.0300	-0.0300	-0.0131	
.230 dim 1 sd 2 3_D7	Z	-0.2286	-0.2300	0.0100	-0.0100	0.0014	
1.10 dim 1 sd2 2_C7_X	Dist	1.1002	1.1000	0.0300	-0.0300	0.0002	
1.07 dim 1 sd2 3_D7_Z	Dist	1.0707	1.0700	0.0300	-0.0300	0.0007	
.30 depth 1 sd2 3_D7	Y	-0.3039	-0.3000	0.0300	-0.0300	-0.0039	
.230 dim 2 sd 2 3_D7	Z	-0.2286	-0.2300	0.0100	-0.0100	0.0014	
1.50 dim sd2 2_C6_X	Dist	1.5007	1.5000	0.0300	-0.0300	0.0007	
1.07 dim 2 sd2 3_D7_Z	Dist	1.0707	1.0700	0.0300	-0.0300	0.0007	
.30 depth 2 sd2 3_D7	Y	-0.3036	-0.3000	0.0300	-0.0300	-0.0036	
.230 dim 3 sd 2 3_D7	Z	-0.2285	-0.2300	0.0100	-0.0100	0.0015	
1.55 dim sd2 2_C6_X	Dist	1.5507	1.5500	0.0300	-0.0300	0.0007	
1.07 dim 3 sd2 3_D7_Z	Dist	1.0707	1.0700	0.0300	-0.0300	0.0007	
.30 depth 3 sd2 3_D7	Y	-0.3033	-0.3000	0.0300	-0.0300	-0.0033	
.230 dim 4 sd 2 3_D7	Z	-0.2293	-0.2300	0.0100	-0.0100	0.0007	
9.75 dim sd2 2_C5_X	Dist	9.7507	9.7500	0.0300	-0.0300	0.0007	
1.07 dim 4 sd2 3_D7_Z	Dist	1.0700	1.0700	0.0300	-0.0300	0.0000	
.30 depth 4 sd2 3_D7	Y	-0.3036	-0.3000	0.0300	-0.0300	-0.0036	
1.20 dim sd 2 2_C4_X	Dist	1.1994	1.2000	0.0300	-0.0300	-0.0006	
.230 dim 5 sd 2 3_D7	Z	-0.2290	-0.2300	0.0100	-0.0100	0.0010	
1.10 dim 2 sd2 2_C4_X	Dist	1.1006	1.1000	0.0300	-0.0300	0.0006	
1.07 dim 5 sd2 3_D7_Z	Dist	1.0708	1.0700	0.0300	-0.0300	0.0008	
.30 depth 5 sd2 3_D7	Y	-0.3031	-0.3000	0.0300	-0.0300	-0.0031	
.204 holes 2_A5(1)	D	0.2031	0.2040	0.0050	-0.0010	-0.0009	
.204 holes 2_A5(2)	D	0.2032	0.2040	0.0050	-0.0010	-0.0008	
.204 holes 2_A5(3)	D	0.2033	0.2040	0.0050	-0.0010	-0.0007	
Pos_.204 hole 1 2_B6^X	GDT PosRec	0.0003	0.0000	0.0600		0.0003	
	X	7.1501	7.1500			0.0001	
Pos_.204 hole 1 2_B6^Y	GDT PosRec	0.0082	0.0000	0.0200		0.0082	
	Y	1.1841	1.1800			0.0041	
Pos_.204 hole 2 2_B5^X	GDT PosRec	0.0000	0.0000	0.0200		0.0000	
	X	1.7500	1.7500			0.0000	
Pos_.204 hole 2 2_B5^Y	GDT PosRec	0.0081	0.0000	0.0200		0.0081	
	Y	1.1841	1.1800			0.0041	
Pos_.204 hole 3 2_B5^X	GDT PosRec	0.0027	0.0000	0.0200		0.0027	
	X	-0.0013	0.0000			-0.0013	



Feature	ID	Actual	Nominal	pos Tol	neg Tol	Diff	<- ->
☐ Pos_.204 hole 3 2_B5^Y	GDT PosRec Y	0.0061 -2.3631	0.0000 -2.3600	0.0200		0.0061 -0.0031	-
☐ .63 c'bores 2_A5(1)	D	0.6246	0.6250	0.0300	-0.0300	-0.0004	-
☐ .63 c'bores 2_A5(2)	D	0.6248	0.6250	0.0300	-0.0300	-0.0002	-
☐ .63 c'bores 2_A5(3)	D	0.6247	0.6250	0.0300	-0.0300	-0.0003	-
☐ .10 depth 1 2_A5	Z	-0.1005	-0.1000	0.0300	-0.0300	-0.0005	-
☐ .10 depth 2 2_A5	Z	-0.1005	-0.1000	0.0300	-0.0300	-0.0005	-
☐ .10 depth 3 2_A5	Z	-0.0998	-0.1000	0.0300	-0.0300	0.0002	-
☐ 1.00 rad 2_B5	R	0.9993	1.0000	0.0300	-0.0300	-0.0007	-
☐ 0.45 rad 2_B5	R	0.4502	0.4500	0.0300	-0.0300	0.0002	-
☐ .280 dim 3_D8	CartDist	0.2761	0.2800	0.0100	-0.0100	-0.0039	-
☐ 1.8 deg angle 3_D5	A2	-1.7953	-1.8000	0.5000	-0.5000	0.0047	-
☐ .204 dim 1 3_D4	Z	-0.2042	-0.2040	0.0100	-0.0100	-0.0002	-
☐ .204 dim 2 3_D4	Z	-0.2030	-0.2040	0.0100	-0.0100	0.0010	-
☐ .104 dim 1 3_D6	Z	-0.1058	-0.1040	0.0100	-0.0100	-0.0018	-
☐ .104 dim 2 3_D6	Z	-0.1042	-0.1040	0.0100	-0.0100	-0.0002	-
☐ 2.90 deg angle 3_D3	A1	-2.9650	-2.9000	0.5000	-0.5000	-0.0650	-
☐ .047 dim 1 3_D3	Z	-0.0482	-0.0470	0.0100	-0.0100	-0.0012	-
☐ .047 dim 2 3_D3	Z	-0.0480	-0.0470	0.0100	-0.0100	-0.0010	-
☐ .300 dim 1 3_D1	Z	-0.2985	-0.3000	0.0100	-0.0100	0.0015	-
☐ .300 dim 2 3_D1	Z	-0.2976	-0.3000	0.0100	-0.0100	0.0024	-
☐ .313 dia 1d 3_A6	D	0.3132	0.3130	0.0060	-0.0010	0.0002	-
☐ 2.44 dim 1 3_C6	X	2.4621	2.4400	0.0300	-0.0300	0.0221	-
☐ 2.125 dim 1d 3_B4	Y	-2.1238	-2.1250	0.0100	-0.0100	0.0013	-
☐ .313 hole 1d Perp to islands	GDT Perp	0.0001	0.0000	0.0100		0.0001	-
☐ .250 dia 1d 3_C4	D	0.2505	0.2500	0.0050	-0.0010	0.0005	-
☐ 2.310 dim 1d 3_C5	X	2.3091	2.3100	0.0100	-0.0100	-0.0009	-
☐ 2.125 dim 2d 3_B4	Y	-2.1243	-2.1250	0.0100	-0.0100	0.0007	-
☐ .250 hole 1d Perp to islands	GDT Perp	0.0009	0.0000	0.0100		0.0009	-
☐ .250 dia 2d 3_C6	D	0.2505	0.2500	0.0050	-0.0010	0.0005	-
☐ 2.44 dim 2 3_C6	X	2.4626	2.4400	0.0300	-0.0300	0.0226	-
☐ 4.250 dim 1d 3_B4	Y	2.1277	2.1250	0.0100	-0.0100	0.0028	-
☐ .250 hole 2d Perp to islands	GDT Perp	0.0014	0.0000	0.0100		0.0014	-
☐ .250 dia 3d 3_C4	D	0.2505	0.2500	0.0050	-0.0010	0.0005	-
☐ 2.310 dim 2d 3_C5	X	2.3101	2.3100	0.0100	-0.0100	0.0001	-
☐ 4.250 dim 2d 3_B4	Y	4.2528	4.2500	0.0100	-0.0100	0.0028	-
☐ .250 hole 3d Perp to islands	GDT Perp	0.0025	0.0000	0.0100		0.0025	-
☐ .63 c'bore 1d 3_A6	D	0.6229	0.6300	0.0300	-0.0300	-0.0071	-
☐ .14 depth 1d 3_A6	Z	-0.1345	-0.1400	0.0300	-0.0300	0.0055	-
☐ .63 c'bore 2d 3_C4	D	0.6228	0.6300	0.0300	-0.0300	-0.0072	-
☐ .14 depth 2d 3_C4	Z	-0.1347	-0.1400	0.0300	-0.0300	0.0053	-
☐ .63 c'bore 3d 3_C6	D	0.6229	0.6300	0.0300	-0.0300	-0.0071	-
☐ .13 depth 1d 3_C4	Z	-0.1266	-0.1300	0.0300	-0.0300	0.0034	-
☐ .63 c'bore 4d 3_C4	D	0.6228	0.6300	0.0300	-0.0300	-0.0072	-
☐ .13 depth 2d 3_C4	Z	-0.1271	-0.1300	0.0300	-0.0300	0.0029	-



Feature	ID	Actual	Nominal	pos Tol	neg Tol	Diff	<- ->
.250 hole 1e 3_A3	D	0.2505	0.2500	0.0050	-0.0010	0.0005	—
1.81 dim 1e 3_B1	X	-1.8114	-1.8125	0.0100	-0.0100	0.0011	—
2.125 dim 1e 3_B2	Y	2.1212	2.1250	0.0100	-0.0100	-0.0038	—
.250 hole 1e Perp to islands	GDT Perp	0.0017	0.0000	0.0100		0.0017	—
.313 hole 1e 3_C2	D	0.3130	0.3125	0.0060	-0.0010	0.0005	—
2.310 dim 1e 3_B1	X	-2.3104	-2.3100	0.0100	-0.0100	-0.0004	—
2.125 dim 2e 2_B2	Y	2.1217	2.1250	0.0100	-0.0100	-0.0033	—
.313 hole 1e Perp to islands	GDT Perp	0.0032	0.0000	0.0100		0.0032	—
.250 hole 2e 3_B3	D	0.2505	0.2500	0.0050	-0.0010	0.0005	—
1.81 dim 2e 3_B1	X	-1.8128	-1.8100	0.0300	-0.0300	-0.0028	—
4.245 dim 1e 3_B2_3d	Dist	4.2485	4.2478	0.0100	-0.0100	0.0007	—
.250 hole 2e Perp to islands	GDT Perp	0.0019	0.0000	0.0100		0.0019	—
.250 hole 3e 3_B3	D	0.2505	0.2500	0.0050	-0.0010	0.0005	—
2.310 dim 2e 3_B1	X	-2.3094	-2.3100	0.0100	-0.0100	0.0006	—
4.245 dim 2e 3_B2_3d	Dist	4.2511	4.2478	0.0100	-0.0100	0.0033	—
.250 hole 3e Perp to islands	GDT Perp	0.0007	0.0000	0.0100		0.0007	—
.63 dia c'bore 1e 3_A3	D	0.6239	0.6300	0.0300	-0.0300	-0.0061	—
.14 depth 1e 3_A3	Z	-0.1333	-0.1400	0.0300	-0.0300	0.0067	—
.63 dia c'bore 2e 3_C2	D	0.6230	0.6300	0.0300	-0.0300	-0.0070	—
.14 depth 2e 3_C2	Z	-0.1308	-0.1400	0.0300	-0.0300	0.0092	—
.63 c'bore 3e 3_B3	D	0.6241	0.6300	0.0300	-0.0300	-0.0059	—
.20 depth 1e 3_B3	Z	-0.1917	-0.2000	0.0300	-0.0300	0.0083	—
.63 c'bore 4e 3_B3	D	0.6229	0.6300	0.0300	-0.0300	-0.0071	—
.20 depth 2e 3_B3	Z	-0.1924	-0.2000	0.0300	-0.0300	0.0076	—



Customer Dart Aerospace Customer P.O. PO30760

Drawing # E4702 Drawing rev A

Part Number E4702-1 E.C.O. -

Part Name Ladder Material Aluminum Alloy 7075-T7351 per AMS QQ-A-250/12

Serial # 37729-006 Inspected by Cliff Smith

Job # 37729 Signature:



Overall Result

All Characteristics: 199
 Out of tolerance: 0
 Over Warning Limit: 0
 Not Calculated: 0

Comment: Material: 7075-T7351 per AMS QQ-A-250/12
 ref. 'Kaiser Aluminum' Lot# 144419B9
 (Wejay TN# 031699-1)

Feature	ID	Actual	Nominal	Pos Tol.	Neg Tol.	Deviation	<- >
☐ 5.00 width o.a. 2_C3	CartDist	5.0045	5.0000	0.0300	-0.0300	0.0045	
☐ 25.25 dim 1 2_C6	X	25.2511	25.2500	0.0300	-0.0300	0.0011	
☐ 25.25 dim 2 2_C6	X	25.2500	25.2500	0.0300	-0.0300	0.0000	
☐ 2.453 dim 2_B8	Y	-2.4500	-2.4525	0.0100	-0.0100	0.0026	
☐ 2.453 dim 2 2_B4	Y	-2.4507	-2.4525	0.0100	-0.0100	0.0018	
☐ 4.905 dim 2_B8	CartDist	4.8996	4.9050	0.0100	-0.0100	-0.0054	
☐ 4.645 dim 2_B3	CartDist	4.6488	4.6450	0.0100	-0.0100	0.0038	
☐ .655 dim 1 of 2 2_B7	CartDist	0.6511	0.6550	0.0000	-0.0050	-0.0039	
☐ .655 dim 2 of 2 2_B7	CartDist	0.6538	0.6550	0.0000	-0.0050	-0.0012	
☐ .655 dim 3 2_B3	CartDist	0.6546	0.6550	0.0000	-0.0050	-0.0004	
☐ .655 dim 4 2_B3	CartDist	0.8127	0.8150	0.0000	-0.0050	-0.0023	
☐ .45 dim 1 of 2 2_B7_Y	Dist	0.4442	0.4500	0.0300	-0.0300	-0.0058	
☐ .45 dim 2 of 2 2_B7_Y	Dist	0.4442	0.4500	0.0300	-0.0300	-0.0058	
☐ .46 dim 2_B4	ResEle	0.4662	0.4600	0.0300	-0.0300	0.0062	
☐ .51 dim 2_B4	ResEle	0.4969	0.5100	0.0300	-0.0300	-0.0131	
☐ 1.49 dim 2_D7	X	1.4902	1.4900	0.0300	-0.0300	0.0002	
☐ 5.27 dim 2_D7	CartDist	5.2689	5.2700	0.0300	-0.0300	-0.0011	
☐ 2.35 dim 2_D6	CartDist	2.3500	2.3500	0.0300	-0.0300	0.0000	
☐ 9.13 dim 2_D5	CartDist	9.1248	9.1300	0.0300	-0.0300	-0.0052	
☐ 3.50 dim 1 3_D8	CartDist	3.5012	3.5000	0.0300	-0.0300	0.0012	
☐ 3.50 dim 2 3_D8	CartDist	3.4996	3.5000	0.0300	-0.0300	-0.0004	
☐ 3.50 dim 3 3_D8	CartDist	3.5009	3.5000	0.0300	-0.0300	0.0009	
☐ 3.50 dim 4 3_D8	CartDist	3.5064	3.5000	0.0300	-0.0300	0.0064	
☐ .40 sect 1 2_D7	CartDist	0.3997	0.4000	0.0300	-0.0300	-0.0003	
☐ .40 sect 2 2_D7	CartDist	0.4002	0.4000	0.0300	-0.0300	0.0002	
☐ .40 sect 3 2_D7	CartDist	0.4003	0.4000	0.0300	-0.0300	0.0003	
☐ .40 sect 4 2_D7	CartDist	0.3968	0.4000	0.0300	-0.0300	-0.0032	
☐ R 0.56 typ 2_D5	R	0.5616	0.5600	0.0300	-0.0300	0.0016	
☐ 0.250 holes 2_D6(1)	D	0.2504	0.2500	0.0050	-0.0010	0.0004	
☐ 0.250 holes 2_D6(2)	D	0.2505	0.2500	0.0050	-0.0010	0.0005	
☐ 0.250 holes 2_D6(3)	D	0.2505	0.2500	0.0050	-0.0010	0.0005	
☐ 0.250 holes 2_D6(4)	D	0.2504	0.2500	0.0050	-0.0010	0.0004	



Feature	ID	Actual	Nominal	pos Tol	neg Tol	Diff	<- ->
Pos_.250 hole 1	2_D6^X	GDT PosRec	0.0048	0.0000	0.0600	0.0048	-
	X	7.3876	7.3900			-0.0024	
Pos_.250 hole 1	2_D6^Y	GDT PosRec	0.0048	0.0000	0.0200	0.0048	-
	Y	2.1274	2.1250			0.0024	
Pos_.250 hole 2	2_D6^X	GDT PosRec	0.0007	0.0000	0.0200	0.0007	-
	X	2.7503	2.7500			0.0003	
Pos_.250 hole 2	2_D6^Y	GDT PosRec	0.0034	0.0000	0.0200	0.0034	-
	Y	2.1267	2.1250			0.0017	
Pos_.250 hole 3	2_D6^X	GDT PosRec	0.0005	0.0000	0.0200	0.0005	-
	X	0.0003	0.0000			0.0003	
Pos_.250 hole 3	2_D6^Y	GDT PosRec	0.0028	0.0000	0.0200	0.0028	-
	Y	-4.2514	-4.2500			-0.0014	
Pos_.250 hole 4	2_D6^X	GDT PosRec	0.0012	0.0000	0.0200	0.0012	-
	X	2.7506	2.7500			0.0006	
Pos_.250 hole 4	2_D6^Y	GDT PosRec	0.0024	0.0000	0.0200	0.0024	-
	Y	-4.2512	-4.2500			-0.0012	
.3745 dia 1	1_A8	D	0.3749	0.3745	0.0005	0.0000	-
6.950 dim 1	2_C7	X	-6.9504	-6.9500	0.0100	-0.0100	-
.986 dim 1	2_C7	Z	-0.9833	-0.9860	0.0100	-0.0100	-
.3745 dia 2	1_A8	D	0.3748	0.3745	0.0005	0.0000	-
6.950 dim 2	2_C7	X	-6.9497	-6.9500	0.0100	-0.0100	-
.986 dim 2	2_C7	Z	-0.9837	-0.9860	0.0100	-0.0100	-
.3745 dia 3	1_A8	D	0.3748	0.3745	0.0005	0.0000	-
24.375 dim 1	2_B6	X	24.3769	24.3750	0.0100	-0.0100	-
.720 dim 1	2_C4	Z	-0.7201	-0.7200	0.0100	-0.0100	-
.3745 dia 4	1_A8	D	0.3749	0.3745	0.0005	0.0000	-
24.375 dim 2	2_B6	X	24.3776	24.3750	0.0100	-0.0100	-
.720 dim 2	2_C4	Z	-0.7194	-0.7200	0.0100	-0.0100	-
.44 dim 1	2_B7	X	0.4522	0.4400	0.0300	-0.0300	-
.44 dim 2	2_B7	X	0.4522	0.4400	0.0300	-0.0300	-
.986 dim 1	2_C7	Z	-1.0060	-0.9860	0.0300	-0.0300	-
.986 dim 2	2_C7	Z	-1.0063	-0.9860	0.0300	-0.0300	-
1.35 dim	1_C7	X	1.3481	1.3500	0.0300	-0.0300	-
1.82 dim	2_C4	X	-1.8161	-1.8200	0.0300	-0.0300	-
24.38 dim 1	1_B7_X	Dist	24.3614	24.3800	0.0300	-0.0300	-
24.38 dim 2	1_B7_X	Dist	24.3614	24.3800	0.0300	-0.0300	-
2.60 dim sd 1	2_C7	X	2.5852	2.6000	0.0300	-0.0300	-
.230 dim 1 sd 1	3_D7	Z	-0.2281	-0.2300	0.0100	-0.0100	-
1.10 dim 1 sd1	2_C7_X	Dist	1.1008	1.1000	0.0300	-0.0300	-
1.07 dim 1 sd1	3_D7_Z	Dist	1.0707	1.0700	0.0300	-0.0300	-
.30 depth 1 sd1	3_D7	Y	0.3059	0.3000	0.0300	-0.0300	-
.230 dim 2 sd 1	3_D7	Z	-0.2281	-0.2300	0.0100	-0.0100	-
1.50 dim sd1	2_C6_X	Dist	1.5007	1.5000	0.0300	-0.0300	-
1.07 dim 2 sd1	3_D7_Z	Dist	1.0708	1.0700	0.0300	-0.0300	-
.30 depth 2 sd1	3_D7	Y	0.3064	0.3000	0.0300	-0.0300	-
.230 dim 3 sd 1	3_D7	Z	-0.2283	-0.2300	0.0100	-0.0100	-
1.55 dim sd1	2_C6_X	Dist	1.5509	1.5500	0.0300	-0.0300	-



Feature	ID	Actual	Nominal	pos Tol	neg Tol	Diff	<- ->
☐ 1.07 dim 3 sd1 3_D7_Z	Dist	1.0707	1.0700	0.0300	-0.0300	0.0007	
☐ .30 depth 3 sd1 3_D7	Y	0.3069	0.3000	0.0300	-0.0300	0.0069	
☐ .230 dim 4 sd 1 3_D7	Z	-0.2293	-0.2300	0.0100	-0.0100	0.0007	
☐ 9.75 dim sd1 2_C5_X	Dist	9.7510	9.7500	0.0300	-0.0300	0.0010	
☐ 1.07 dim 4 sd1 3_D7_Z	Dist	1.0709	1.0700	0.0300	-0.0300	0.0009	
☐ .30 depth 4 sd1 3_D7	Y	0.3082	0.3000	0.0300	-0.0300	0.0082	
☐ 1.20 dim sd 1 2_C4_X	Dist	1.1993	1.2000	0.0300	-0.0300	-0.0007	
☐ .230 dim 5 sd 1 3_D7	Z	-0.2295	-0.2300	0.0100	-0.0100	0.0005	
☐ 1.10 dim 2 sd1 2_C4_X	Dist	1.1006	1.1000	0.0300	-0.0300	0.0006	
☐ 1.07 dim 5 sd1 3_D7_Z	Dist	1.0710	1.0700	0.0300	-0.0300	0.0010	
☐ .30 depth 5 sd1 3_D7	Y	0.3095	0.3000	0.0300	-0.0300	0.0095	
☐ 2.60 dim sd 2 2_C7	X	2.5857	2.6000	0.0300	-0.0300	-0.0143	
☐ .230 dim 1 sd 2 3_D7	Z	-0.2288	-0.2300	0.0100	-0.0100	0.0012	
☐ 1.10 dim 1 sd2 2_C7_X	Dist	1.1008	1.1000	0.0300	-0.0300	0.0008	
☐ 1.07 dim 1 sd2 3_D7_Z	Dist	1.0707	1.0700	0.0300	-0.0300	0.0007	
☐ .30 depth 1 sd2 3_D7	Y	-0.3037	-0.3000	0.0300	-0.0300	-0.0037	
☐ .230 dim 2 sd 2 3_D7	Z	-0.2288	-0.2300	0.0100	-0.0100	0.0012	
☐ 1.50 dim sd2 2_C6_X	Dist	1.5008	1.5000	0.0300	-0.0300	0.0008	
☐ 1.07 dim 2 sd2 3_D7_Z	Dist	1.0707	1.0700	0.0300	-0.0300	0.0007	
☐ .30 depth 2 sd2 3_D7	Y	-0.3031	-0.3000	0.0300	-0.0300	-0.0031	
☐ .230 dim 3 sd 2 3_D7	Z	-0.2288	-0.2300	0.0100	-0.0100	0.0012	
☐ 1.55 dim sd2 2_C6_X	Dist	1.5507	1.5500	0.0300	-0.0300	0.0007	
☐ 1.07 dim 3 sd2 3_D7_Z	Dist	1.0707	1.0700	0.0300	-0.0300	0.0007	
☐ .30 depth 3 sd2 3_D7	Y	-0.3025	-0.3000	0.0300	-0.0300	-0.0025	
☐ .230 dim 4 sd 2 3_D7	Z	-0.2291	-0.2300	0.0100	-0.0100	0.0009	
☐ 9.75 dim sd2 2_C5_X	Dist	9.7510	9.7500	0.0300	-0.0300	0.0010	
☐ 1.07 dim 4 sd2 3_D7_Z	Dist	1.0705	1.0700	0.0300	-0.0300	0.0005	
☐ .30 depth 4 sd2 3_D7	Y	-0.3021	-0.3000	0.0300	-0.0300	-0.0021	
☐ 1.20 dim sd 2 2_C4_X	Dist	1.1994	1.2000	0.0300	-0.0300	-0.0006	
☐ .230 dim 5 sd 2 3_D7	Z	-0.2289	-0.2300	0.0100	-0.0100	0.0011	
☐ 1.10 dim 2 sd2 2_C4_X	Dist	1.1006	1.1000	0.0300	-0.0300	0.0006	
☐ 1.07 dim 5 sd2 3_D7_Z	Dist	1.0711	1.0700	0.0300	-0.0300	0.0011	
☐ .30 depth 5 sd2 3_D7	Y	-0.3004	-0.3000	0.0300	-0.0300	-0.0004	
☐ .204 holes 2_A5(1)	D	0.2032	0.2040	0.0050	-0.0010	-0.0008	
☐ .204 holes 2_A5(2)	D	0.2032	0.2040	0.0050	-0.0010	-0.0008	
☐ .204 holes 2_A5(3)	D	0.2032	0.2040	0.0050	-0.0010	-0.0008	
☐ Pos_.204 hole 1 2_B6^X	GDT PosRec X	0.0027 7.1513	0.0000 7.1500	0.0600		0.0027 0.0013	
☐ Pos_.204 hole 1 2_B6^Y	GDT PosRec Y	0.0056 1.1828	0.0000 1.1800	0.0200		0.0056 0.0028	
☐ Pos_.204 hole 2 2_B5^X	GDT PosRec X	0.0000 1.7500	0.0000 1.7500	0.0200		0.0000 0.0000	
☐ Pos_.204 hole 2 2_B5^Y	GDT PosRec Y	0.0061 1.1830	0.0000 1.1800	0.0200		0.0061 0.0030	
☐ Pos_.204 hole 3 2_B5^X	GDT PosRec X	0.0015 -0.0007	0.0000 0.0000	0.0200		0.0015 -0.0007	



Feature	ID	Actual	Nominal	pos Tol	neg Tol	Diff	<- >
Pos_.204 hole 3 2_B5^Y	GDT PosRec Y	0.0063 -2.3632	0.0000 -2.3600	0.0200		0.0063 -0.0032	
.63 c'bores 2_A5(1)	D	0.6242	0.6250	0.0300	-0.0300	-0.0008	-
.63 c'bores 2_A5(2)	D	0.6245	0.6250	0.0300	-0.0300	-0.0005	-
.63 c'bores 2_A5(3)	D	0.6245	0.6250	0.0300	-0.0300	-0.0005	-
.10 depth 1 2_A5	Z	-0.1007	-0.1000	0.0300	-0.0300	-0.0007	-
.10 depth 2 2_A5	Z	-0.1005	-0.1000	0.0300	-0.0300	-0.0005	-
.10 depth 3 2_A5	Z	-0.1000	-0.1000	0.0300	-0.0300	0.0000	-
1.00 rad 2_B5	R	0.9998	1.0000	0.0300	-0.0300	-0.0002	-
0.45 rad 2_B5	R	0.4501	0.4500	0.0300	-0.0300	0.0001	
.280 dim 3_D8	CartDist	0.2762	0.2800	0.0100	-0.0100	-0.0038	-
1.8 deg angle 3_D5	A2	-1.7937	-1.8000	0.5000	-0.5000	0.0063	
.204 dim 1 3_D4	Z	-0.2031	-0.2040	0.0100	-0.0100	0.0009	
.204 dim 2 3_D4	Z	-0.2027	-0.2040	0.0100	-0.0100	0.0013	
.104 dim 1 3_D6	Z	-0.1050	-0.1040	0.0100	-0.0100	-0.0010	-
.104 dim 2 3_D6	Z	-0.1040	-0.1040	0.0100	-0.0100	0.0000	-
2.90 deg angle 3_D3	A1	-2.9597	-2.9000	0.5000	-0.5000	-0.0597	-
.047 dim 1 3_D3	Z	-0.0472	-0.0470	0.0100	-0.0100	-0.0002	-
.047 dim 2 3_D3	Z	-0.0468	-0.0470	0.0100	-0.0100	0.0002	
.300 dim 1 3_D1	Z	-0.2973	-0.3000	0.0100	-0.0100	0.0027	
.300 dim 2 3_D1	Z	-0.2966	-0.3000	0.0100	-0.0100	0.0034	
.313 dia 1d 3_A6	D	0.3131	0.3130	0.0060	-0.0010	0.0001	-
2.44 dim 1 3_C6	X	2.4613	2.4400	0.0300	-0.0300	0.0213	
2.125 dim 1d 3_B4	Y	-2.1244	-2.1250	0.0100	-0.0100	0.0006	
.313 hole 1d Perp to islands	GDT Perp	0.0015	0.0000	0.0100		0.0015	
.250 dia 1d 3_C4	D	0.2504	0.2500	0.0050	-0.0010	0.0004	-
2.310 dim 1d 3_C5	X	2.3087	2.3100	0.0100	-0.0100	-0.0013	-
2.125 dim 2d 3_B4	Y	-2.1249	-2.1250	0.0100	-0.0100	0.0001	
.250 hole 1d Perp to islands	GDT Perp	0.0013	0.0000	0.0100		0.0013	
.250 dia 2d 3_C6	D	0.2504	0.2500	0.0050	-0.0010	0.0004	-
2.44 dim 2 3_C6	X	2.4608	2.4400	0.0300	-0.0300	0.0208	
4.250 dim 1d 3_B4	Y	2.1256	2.1250	0.0100	-0.0100	0.0006	
.250 hole 2d Perp to islands	GDT Perp	0.0012	0.0000	0.0100		0.0012	
.250 dia 3d 3_C4	D	0.2504	0.2500	0.0050	-0.0010	0.0004	-
2.310 dim 2d 3_C5	X	2.3086	2.3100	0.0100	-0.0100	-0.0014	-
4.250 dim 2d 3_B4	Y	4.2515	4.2500	0.0100	-0.0100	0.0015	
.250 hole 3d Perp to islands	GDT Perp	0.0012	0.0000	0.0100		0.0012	
.63 c'bore 1d 3_A6	D	0.6230	0.6300	0.0300	-0.0300	-0.0070	-
.14 depth 1d 3_A6	Z	-0.1343	-0.1400	0.0300	-0.0300	0.0057	
.63 c'bore 2d 3_C4	D	0.6227	0.6300	0.0300	-0.0300	-0.0073	-
.14 depth 2d 3_C4	Z	-0.1350	-0.1400	0.0300	-0.0300	0.0050	
.63 c'bore 3d 3_C6	D	0.6228	0.6300	0.0300	-0.0300	-0.0072	-
.13 depth 1d 3_C4	Z	-0.1264	-0.1300	0.0300	-0.0300	0.0036	
.63 c'bore 4d 3_C4	D	0.6228	0.6300	0.0300	-0.0300	-0.0072	-
.13 depth 2d 3_C4	Z	-0.1274	-0.1300	0.0300	-0.0300	0.0026	



Feature	ID	Actual	Nominal	pos Tol	neg Tol	Diff	<-->
☒ .250 hole 1e 3_A3	D	0.2505	0.2500	0.0050	-0.0010	0.0005	—
☒ 1.81 dim 1e 3_B1	X	-1.8108	-1.8125	0.0100	-0.0100	0.0017	—
☐ 2.125 dim 1e 3_B2	Y	2.1209	2.1250	0.0100	-0.0100	-0.0041	—
☐ .250 hole 1e Perp to islands	GDT Perp	0.0014	0.0000	0.0100		0.0014	—
☐ .313 hole 1e 3_C2	D	0.3129	0.3125	0.0060	-0.0010	0.0004	—
☒ 2.310 dim 1e 3_B1	X	-2.3105	-2.3100	0.0100	-0.0100	-0.0005	—
☒ 2.125 dim 2e 2_B2	Y	2.1201	2.1250	0.0100	-0.0100	-0.0049	—
☐ .313 hole 1e Perp to islands	GDT Perp	0.0028	0.0000	0.0100		0.0028	—
☒ .250 hole 2e 3_B3	D	0.2505	0.2500	0.0050	-0.0010	0.0005	—
☒ 1.81 dim 2e 3_B1	X	-1.8123	-1.8100	0.0300	-0.0300	-0.0023	—
☐ 4.245 dim 1e 3_B2_3d	Dist	4.2472	4.2478	0.0100	-0.0100	-0.0006	—
☒ .250 hole 2e Perp to islands	GDT Perp	0.0004	0.0000	0.0100		0.0004	—
☒ .250 hole 3e 3_B3	D	0.2504	0.2500	0.0050	-0.0010	0.0004	—
☒ 2.310 dim 2e 3_B1	X	-2.3115	-2.3100	0.0100	-0.0100	-0.0015	—
☐ 4.245 dim 2e 3_B2_3d	Dist	4.2494	4.2478	0.0100	-0.0100	0.0016	—
☐ .250 hole 3e Perp to islands	GDT Perp	0.0007	0.0000	0.0100		0.0007	—
☐ .63 dia c'bore 1e 3_A3	D	0.6237	0.6300	0.0300	-0.0300	-0.0063	—
☒ .14 depth 1e 3_A3	Z	-0.1324	-0.1400	0.0300	-0.0300	0.0076	—
☒ .63 dia c'bore 2e 3_C2	D	0.6230	0.6300	0.0300	-0.0300	-0.0070	—
☐ .14 depth 2e 3_C2	Z	-0.1303	-0.1400	0.0300	-0.0300	0.0097	—
☐ .63 c'bore 3e 3_B3	D	0.6241	0.6300	0.0300	-0.0300	-0.0059	—
☐ .20 depth 1e 3_B3	Z	-0.1927	-0.2000	0.0300	-0.0300	0.0073	—
☐ .63 c'bore 4e 3_B3	D	0.6228	0.6300	0.0300	-0.0300	-0.0072	—
☐ .20 depth 2e 3_B3	Z	-0.1929	-0.2000	0.0300	-0.0300	0.0071	—